

Vacuflow® Vacuum Sewer system



Kitajo Area, Tokoname-City - Japan

Introduction

Tokoname's ceramic is famous product with 1,000 years history. Kitajo area is the oldest part of city, and a lot of ceramic manufacture locates in this area. They raced to install water and Gas pipeline in the area for their production. These pipelines and narrow pass disturb Sewage installation.

At first, Tokoname city planned conventional gravity sewer for whole area, and pump installation to low dwellings.

However, gravity sewer installation was predicted as pretty hard, also installation and maintenance cost of pumps are expensive.

Their conclusion was Vacuflow vacuum sewage.

Specification

Narrow pass disturbs the installation of standard interface-unit with single 90mm valve. Therefore interface-unit with single 63mm valve was installed for each dwellings.

Each interface-unit equips buzzer alarm unit for easy maintenance. The buzzer alarm unit is connected to open/close sensor and water-level sensor, and detect count of operation, unusual valve-opening duration, and unusual high water-level in the unit.

Vacuum-station stands approx. 110m away from west end of the area, across the creek.

To underpass the creek without pressure-drop, VVS (Vacuflow-Vacuum-Siphon) was installed. narrow trenching.

Technical information

Classification: Public Sewage

Operation started: 2001

Sewage amount: 15.5m³/h

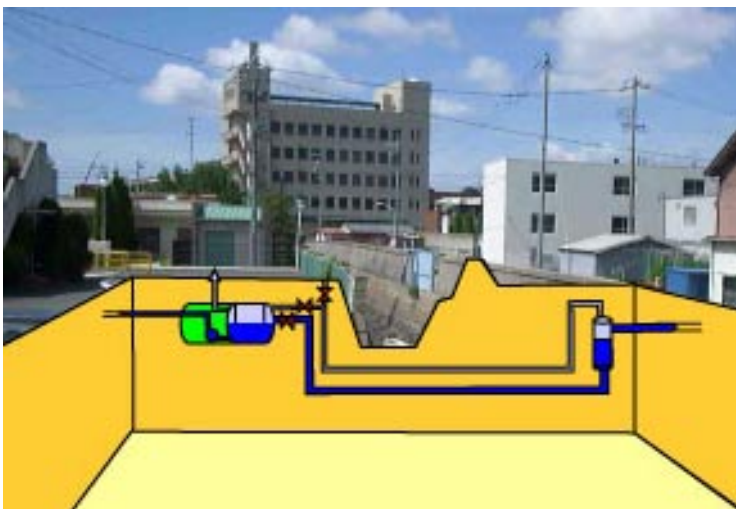
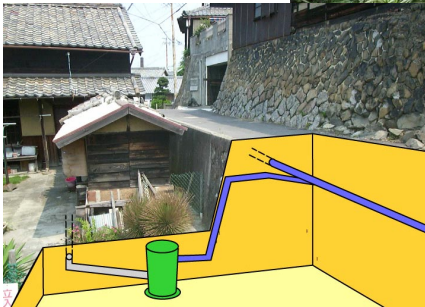
Total sewer length: 2.1km(PVC-pipe)

Interface unit: 129 with Buzzer-alarm

Interface unit and Buzzer-alarm unit.



Installation for low dwelling



Cross-section: Vacuum-station and VVS